

Table A1: Data Block Format for PCSodar Wind Data Files (*.Dat)

Line No.	Parameter
1	Station name, year, month, day, time, PCSodar version number.
2	Averaging time (min), transmit frequency (Hz), range (m), range interval (m), first gate (m), pulse duration (ms), pulse level (%), rotation angle (degrees), ambient temperature (C), vertical wind speed correction (true/false), minimum signal-to-noise ratio (dB), minimum amplitude, consensus, minimum percent data, FFT size, sample rate (Hz), zero padding factor, bin width (bins), u bandwidth (bins), v bandwidth (bins), w bandwidth (bins), Hamming (true/false), Hanning (true/false), compensation delay time (ms), frequency input compensation (degrees), frequency output compensation (degrees), channel 1 w amplitude (%), channel 2 w amplitude (%), channel 1 u/v amplitude (%), channel 2 u/v amplitude (%), w phase compensation (degrees), u/v phase compensation (degrees), element spacing (cm), reflector board option, anemometer option, temperature 1 option, temperature 2 option, solar radiation option, precipitation option, relative humidity option, battery voltage option, relay delay (ms), system delay (sec), digital filtering option, pulse ramp (%), temperature 2 or precip switch option, solar radiation or generator option, parameter 2 ID, W echo rejection option, V echo rejection option, U echo rejection option, compass option, roof sensor option, solar charger option, input buffer delay, display pressure units, sonic option, heater option
3	Height (m), vector wind speed (m/s), vector wind direction (degrees), wind speed/wind direction reliability, w speed (m/s), w reliability, w count, w standard deviation (m/s), w amplitude, w noise, w signal-to-noise ratio, w valid count, v speed (m/s), v reliability, v count, v standard deviation (m/s), v amplitude, v noise, v signal-to-noise ratio, v valid count, u speed (m/s), u reliability, u count, u standard deviation (m/s), u amplitude, u noise, u signal-to-noise ratio, u valid count
4 up to last range gate	A line formatted like Line No. 3 for each range gate. <i>Example:</i> For 14 range gates, the data block would contain 14 lines of sodar data formatted as shown for Line No. 3.
If any external sensors are being sampled, their data will be recorded following the wind data, in this sequence.	
	anemometer (Arithmetic wind speed (m/s), unit vector wind direction (degrees), vector wind speed (m/s), vector wind direction (degrees), wind direction standard deviation (degrees))
	temperature 1 (deg. C)
	temperature 2 (deg. C) or precipitation switch (volts)
	solar radiation (watts/m ²), generator voltage (volts), or barometric pressure (mb)
	precipitation (mm)
	relative humidity (%)
	battery voltage (volts)